

THE IMPORTANCE OF INTERNET AND FACTORS INFLUENCING INTERNET USAGE OF TEACHING FACULTIES - A STUDY WITH SPECIAL REFERENCE TO SELECTED ARTS COLLEGES AFFILIATED TO BHARATHIAR UNIVERSITY

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ABSTRACT

The college library systems are of critical importance due to the overwhelming number of students depending on them for their educational needs. Added to this, shortage of quality institutes compound the problems of users. Though the University Grants Commission has done its part by allowing new age concepts to enter into the library arena, yet a lot needs to be done to uplift the academic libraries from their pitiable plights and restore their glory so that they contribute to the intellectual prosperity of the society. Advancements in technology opens up vistas of learning opportunities before a cross section of users who make use of these tools to source their specific resource needs. In recent times, a large number of users have put their collective faith in the power of digital tools that provide quite exciting and timely access to huge amounts of information/data. All these make the learners develop familiarity and productive interfaces with their chosen learning material in a manner that is desirable and effective. In this aspect the present study is an attempt to measure the importance of internet and factors influencing internet usage of teaching faculties who are working under the affiliation of Bharathiar university Coimbatore.

KEYWORDS: *University Grants Commission, Academic Libraries, Digital Tools, Internet, Teaching Faculties, Bharathiar University Coimbatore*

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INTRODUCTION

The origin of the term, 'Library' may be traced back to its origin in the French word, 'librairie' as well as the Latin word, 'liber' that means book. Simply put, a library makes available a wide spectrum of information resources to a large and diverse set of people who primarily seek them for reference. This is a set up that enables users to access materials both in print as well as electronic forms by organizing them in a complex or building or even on a virtual network. A library may have diverse range of resources like books, periodicals, newspapers, manuscripts, films, maps, prints, documents, microform, CDs, cassettes, videotapes, DVDs, Blu-ray Discs, e-books, audio books, databases, and other formats. Faculty or teachers depend on large mounds of information and knowledge to prepare for their various academic assignments like instruction and evaluation. In the pre-digital period, the resources that were earmarked for instructional activities as supplementary to the instructor materials were popularly known as reserves, mostly passed off as reference books or as photocopies of relevant journal articles. In recent times, due to the exponential increase in the number and nature of dependents, libraries need to make muse of innovative solutions to serve diverse group of users.

As far the Education commission recommendations are concerned, any college shall not make expenditure on library less than 6.25 per cent of their total budget in any given year. But, a study by Sardana found

that to be brazenly flouted in a majority of cases with an average outlay between 1.5 per cent and 2.3 per cent. In fact, many colleges make collection development exercise showing scant respect for the real need scenario often oblivious of the specific requirements of the teachers and students. Quite intriguingly, notwithstanding the meager numbers and volumes, ineffective display arrangements play spoilsport, both in content and user satisfaction. The growth of Internet in India has resulted in creation of a large number of direct and indirect employment opportunities with internet service providers and e-commerce companies employing lakhs of young professionals to deliver multiple online products and services. Internet usage also has made large companies or even the smaller ones to perform better. It is quite simple to predict that the Internet will continue to transform every conceivable aspect of human life and add newer experiences. It has the potential to create revolutionary impact on restructuring the nation and society of our times and the revolution also played a vital role in the educational sector and the libraries functioning in the colleges and universities also have direct impact because of this technological growth.

OBJECTIVES OF THE STUDY

The present study is conducted with the aim to find the importance of internet and factors influencing internet usage of teaching faculties

SAMPLING DESIGN AND SELECTION OF THE UNIVERSITY

Selection of the University

Bharathiar University is a state university in Coimbatore, Tamil Nadu, South India. the university was established in February 1982 under the provision of Bharathiar University Act, 1981 (Act 1 of 1982) and was recognized by the University Grants Commission (UGC) in 1985. The university is in the foothills of Marudamalai road, Coimbatore and has jurisdiction over the districts of Coimbatore, Erode and the Nilgiris. It has 111 affiliated institutions (80 arts and science colleges, 29 colleges of education, eight management institutions, one Air Force administration college and one college of physical education).

Sampling Design

With the help of stratified random sampling 50 arts and science college affiliated to Bharathiar university is selected for issuing the sample and in each college a sample of 10 respondents were chosen for the study. The following table shows detailed sampling definition

Table 1: Sampling Definition

| S.No | Nature of Affiliated College | Number of Colleges Affiliated to Bharathiar University | Number of Samples Selected | Number of Questionnaire Issued | Total Questionnaires Issued |
|------|------------------------------|--|----------------------------|--------------------------------|-----------------------------|
| 1 | Arts and Science Colleges | 80 | 35 | 10 | 350 |
| 2 | College of Education | 29 | 10 | 10 | 100 |
| 3 | Management Institution | 8 | 4 | 10 | 40 |
| 4 | Air force Administration | 1 | 1 | 10 | 10 |
| 5 | Physical Education | 1 | 0 | 0 | 0 |
| | Total | 119 | 50 | - | 500 |

Source: Wikipedia and University Grants Commission

STATISTICAL TOOLS USED FOR THE ANALYSIS

- Reliability Analysis
- Factor Analysis

RELIABILITY ANALYSIS

The reliability of scales used in this study was calculated by Cronbach's coefficient alpha. Cronbach's alpha reliability coefficient normally ranges between 0 and 1. However, there is actually no lower limit to the coefficient. The closer Cronbach's alpha coefficient is to 1.0 the greater the internal consistency of the items in the scale. The coefficient alpha values exceeded the minimum standard of .70. It's provided good estimates of internal consistency reliability.

The formula is as follows:

$$\alpha = \frac{kr}{1 + (k - 1)r}$$

- K is the number of items in the scale.
- R is the average correlation pairs of items.
- As the number of items in the scale (k) increase, the value of alpha becomes larger.
- If the inter-correlation between items is large, the corresponding alpha will also be larger.

Table 2: Reliability for the Importance of Internet and Factors Influencing Internet Usage of Teaching Faculties

| S. No | Items | Scale Mean if Item Deleted | Cronbach's Alpha If Item Deleted |
|-------|--|----------------------------|----------------------------------|
| X1 | Internet usage improve and add a new dimension in teaching | 48.27 | .775 |
| X2 | Internet Replaces the traditional ways of information delivery | 48.38 | .763 |
| X3 | Internet helps to give immediate answers for the students questions | 48.59 | .770 |
| X4 | Internet provides an opportunity to design their lesson plan creatively | 48.60 | .752 |
| X5 | Internet helps for professional development of the teacher | 48.68 | .752 |
| X6 | Internet allows the teacher and students to access information from all the sources around the globe | 48.64 | .745 |
| X7 | Internet usage help to contribute articles for Online Journals and magazines | 48.68 | .741 |
| X8 | Internet facilities helps in reading Online Journals, Magazines Internet facilities and helps in research activities | 48.52 | .750 |
| X9 | Use of internet demands training to the teachers | 48.51 | .746 |
| X10 | Internet dealings students teacher interaction | 48.50 | .739 |
| X11 | Internet helps in class management for the teachers | 48.51 | .740 |
| X12 | Internet enhance the quality of class room presentation | 48.51 | .745 |
| X13 | Internet provides flexibility in Examination Administration | 48.49 | .748 |
| X14 | Internet facilities for conducting Online exams | 48.51 | .747 |
| X15 | Allowing the students to use the internet will improve their learning methodology | 48.59 | .770 |
| X16 | Internet for Educational activities, provides a different avenue for discovery through questioning | 48.60 | .752 |

| Table 2: Contd., | | | |
|-------------------------|--|-------|--------------|
| X17 | Internet for education activities allows students critical evaluation of Information | 48.68 | .752 |
| X18 | Internet gives opportunity to the students to communicate extensively | 48.64 | .745 |
| X19 | Using Internet in the classroom makes it possible for students to easily adapt to the work environment | 48.68 | .741 |
| X20 | Internet facilities for assignments submissions by the students | 48.52 | .750 |
| X21 | Students downloading information from the net and turn them in for grades | 48.51 | .746 |
| X22 | Students of Low-Income group cannot access internet | 48.50 | .739 |
| X23 | Use of internet demands change in the attitude of Parents of the students | 48.51 | .740 |
| X24 | Misinterpretation of information in the net is possible | 48.51 | .745 |
| X25 | Internet Promotes Communication skills | 48.49 | .748 |
| | MEAN | | 52.26 |
| | VARIANCE | | 33.458 |
| | STD. DEVIATION | | 5.784 |
| | CRONBACH'S ALPHA | | 0.759 |
| | NO. OF ITEMS | | 25 |

Source: computed

It reveals that all the twenty five measurement scale items are reliable as the Cronbach alpha coefficient of 0.759. It is greater than the threshold level of 0.70. It's provided good estimates of internal consistency reliability and also coefficient alpha values ranged from 0.739 to 0.775 for all the constructs. It is indicating that the scales used in this study were reliable. It clearly indicates that above scale items are consistent with each other and they are reliable measure of factors related to importance of internet and factors influencing internet usage of teaching faculties, so that it can be used for next analysis.

Table 3: Rotated Component Matrix for Factors Related to the Importance of Internet and Factors Influencing Internet Usage of Teaching Faculties

| Variable Code | Component | | | |
|---------------|-------------|-------------|-------------|-------------|
| | I | II | III | IV |
| X2 | .757 | .232 | .063 | .041 |
| X4 | .720 | .210 | .042 | -.032 |
| X9 | .723 | -.151 | .372 | -.005 |
| X10 | .711 | .159 | .302 | .111 |
| X17 | .700 | .059 | .119 | -.096 |
| X18 | .658 | .197 | -.035 | .059 |
| X19 | .629 | -.283 | .294 | .197 |
| X24 | .612 | .072 | .209 | -.283 |
| X3 | .143 | .752 | .111 | .072 |
| X6 | .157 | .747 | -.096 | -.180 |
| X11 | .114 | .711 | .059 | .211 |
| X12 | .054 | .707 | .171 | .143 |
| X21 | .191 | .695 | -.017 | .157 |
| X22 | -.287 | .650 | .180 | .118 |
| X23 | .163 | .625 | -.019 | .054 |
| X25 | .042 | .613 | .180 | .123 |
| X5 | .272 | .263 | .786 | -.287 |
| X8 | .302 | .042 | .579 | .163 |
| X13 | .119 | .172 | .741 | .042 |
| X16 | -.035 | .302 | .695 | .154 |
| X20 | .394 | .119 | .643 | .157 |
| X1 | .209 | -.035 | -.147 | .653 |

| Table 3: Contd., | | | | |
|------------------|------|------|-------|-------------|
| X7 | .063 | .294 | .272 | .612 |
| X14 | .042 | .063 | .319 | .547 |
| X15 | .294 | .175 | -.234 | .502 |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 12 iterations.

Table 4 represents the Rotated Component Matrix, which is an important output of principal component analysis. The coefficients are the factor loadings which represents the correlation between the factors and the twenty five variables (X₁ to X₂₅). From the above factor matrix it is found that coefficients for factor-I have high absolute correlations with eight variables X2 (Internet Replaces the traditional ways of information delivery), X4 (Internet provides an opportunity to design their lesson plan creatively), X9 (Use of internet demands training to the teachers), X10 (Internet dealings students teacher interaction), X17 (Internet for education activities allows students critical evaluation of Information), X18 (Internet gives opportunity to the students to communicate extensively), x19 (Using Internet in the classroom makes it possible for students to easily adapt to the work environment), X20(Misinterpretation of information in the net is possible)

Similarly factor-II has high absolute correlation with variable X3 (Internet helps to give immediate answers for the students), X6 (Internet allows the teacher and students to access information from all the sources around the globe), X11 (Internet helps in class management for the teachers), X12 (Internet enhance the quality of class room presentation), X21 (Students downloading information from the net and turn them in for grades), X22 (Students of Low-Income group cannot access internet), X23 (Use of internet demands change in the attitude of Parents of the students), X25 (Internet Promotes Communication skills).

Next, factor III has high absolute correlation with variable X5 (Internet helps for professional development of the teacher), X8(Internet facilities helps in reading Online Journals, Magazines Internet facilities and helps in research activities), X13 (Internet provides flexibility in Examination Administration), X16 (Internet for Educational activities, provides a different avenue for discovery through questioning), X20(Internet facilities for assignments submissions by the students).

Factor-IV has high absolute correlation with variable X1 (Internet usage improve and add a new dimension in teaching), X7 (Internet usage help to contribute articles for Online Journals and magazines), X14 (Internet facilities for conducting Online exams), X15 (Allowing the students to use the internet will improve their learning methodology).

For example in this study, factor one is at least somewhat correlated with eight variable out of the twenty five variables with absolute value of factor loading greater than or equal to 0.5. In such a complex matrix it is difficult to interpret the factor. So we proceed to compute the rotated factor matrix.

CONCLUSIONS

The Internet provides useful and effective information across multi disciplinary research areas. The amount of educational resources available to students and faculties in internet is voluminous and it continues to grow every day exponentially based on human needs across globe. It is vital for students and faculties to search, identify, evaluate, and use these information sources for their educational purposes and make them competent enough in the industry. The internet is also playing a crucial role in the development of the college teachers in their knowledge updating, preparing their class notes, sharing the resources with their colleagues and to their students. The present study found the importance of internet

and factors influencing internet usage of teaching faculties. The selected 25 elements were reduced to four factors based on their importance with the help of rotated component matrix.

Table 4: Component Transformation Matrix

| Component | 1 | 2 | 3 | 4 |
|-----------|-------|-------|-------|------|
| 1 | .656 | .540 | .523 | .063 |
| 2 | -.261 | -.035 | .253 | .931 |
| 3 | .697 | -.621 | -.263 | .243 |
| 4 | .123 | .567 | -.770 | .265 |

Source: computed

The above table 4 reveals the factor correlation matrix. If the factors are uncorrelated among themselves, then in the factor correlation matrix, the diagonal elements will be 1's and off diagonal elements will be 0's. Since matrix was rotated with Varimax, barring some variables all other variables are found to have, even if not zero correlations but fairly low correlation.

Thus the 25 variables in the data were reduced to four Component factor and each factor may identified with the corresponding variables given below and component plot in rotated space also is given below

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